#### STATE OF SOUTH CAROLINA

#### BEFORE THE PUBLIC SERVICE COMMISSION

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)
) <b>DOCKET NO. 2019-365-E</b>
)

#### DIRECT TESTIMONY OF KENNETH SERCY

ON BEHALF OF THE SOUTHERN ALLIANCE FOR CLEAN ENERGY AND SOUTH
CAROLINA COASTAL CONSERVATION LEAGUE

February 22, 2021

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### Q. PLEASE STATE YOUR NAME, OCCUPATION, AND BUSINESS ADDRESS.

A. My name is Kenneth Sercy. I am an independent electric sector consultant, and my business address is 9042 East 24<sup>th</sup> Place #102, Denver CO 80238.

#### Q. ON WHOSE BEHALF ARE YOU PROVIDING TESTIMONY?

A. I am providing testimony on behalf of the South Carolina Coastal Conservation League ("CCL") and the Southern Alliance for Clean Energy ("SACE").

# Q. PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND AND PROFESSIONAL EXPERIENCE.

A. I have a Bachelor of Science degree from Clemson University and a Master of Environmental Management degree from Duke University, and ten years of experience in electricity markets, policy, and regulation focused on engineering-economic modeling and cost-of-service ratemaking. I have designed, run, and evaluated a variety of electric power modeling analyses including production cost, capacity expansion, and avoided cost and related cost-effectiveness tests, and have evaluated cost recovery, resource planning, asset certification, program and tariff design in more than sixty regulated utility proceedings, primarily in South Carolina. My professional experience also includes modeling renewable energy project economics and conducting market research on competitive procurements, power purchase agreement terms, and interconnection queues.

While studying at Duke University, I worked for two years at the Nicholas Institute for Environmental Policy Solutions supporting energy modeling research using the U.S. Department of Energy's National Energy Modeling System. After graduating from Duke in 2012, I served as CCL's Utility Regulation Specialist for five years, where I managed

the organization's work before the South Carolina Public Service Commission ("Commission") and supported a variety of electric sector policy objectives. Since 2018, I have worked as an independent clean energy consultant providing expert witness testimony, regulatory analysis and guidance, and market research relating to renewable energy and energy storage development, in both traditionally regulated and competitive wholesale regions of the U.S. I have co-authored technical papers published by Clemson University's Strom Thurmond Institute, the North Carolina Sustainable Energy Association, and the journal *Energy Policy*. A copy of my *curriculum vitae* is included as Exhibit A.

### Q. HAVE YOU PREVIOUSLY PROVIDED TESTIMONY TO THIS COMMISSION?

A. Yes, I provided testimony on behalf of the South Carolina Solar Business Alliance in Docket No. 2019-226-E regarding Dominion Energy South Carolina's ("DESC") 2020 Integrated Resource Plan ("IRP").

#### Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. My testimony provides background information on the South Carolina renewable energy market and the policy and regulatory context for exploring a potential competitive procurement of renewable energy program. I review the benefits that could be realized by implementing such a program, and discuss key considerations and recommended best practices for procurement implementation. Finally, I discuss how a competitive procurement of renewable energy fits within the energy policy and regulatory practice of South Carolina, and provide recommendations on how best to approach such a procurement program in the near-term.

### Q. PLEASE PROVIDE A BRIEF SUMMARY OF YOUR CONCLUSIONS AND RECOMMENDATIONS.

A. Competitive procurement of renewable energy offers numerous benefits including least-cost renewables procurement, design flexibility, price discovery, and alignment with utility planning processes, and it is in wide use, including across the Southeastern U.S. South Carolina has a state policy of encouraging renewable energy, yet renewable generation remains a small portion of utility energy mixes. Renewable energy acts as a substitute for coal and gas generation, reducing ratepayer risk exposure, and can also play a key part in enabling coal retirements. Implementing a competitive procurement of renewable energy for Commission jurisdictional utilities for the first time in South Carolina would build valuable institutional and market experience that will enable future procurements that may be larger and more complex. For these reasons, implementing a near-term program for the competitive procurement of renewable energy would be in the public interest.

I recommend a procurement design that is kept as simple as possible, while providing strong assurances of project realization and seeking to add least-cost renewable energy to South Carolina grids and reveal current local market prices, especially for leading renewable technologies such as solar PV and energy storage. Provisions for managing renewable energy curtailment would also be worth considering given jurisdictional utilities within the state have a non-trivial level of existing solar PV penetration on the grid.

I ultimately recommend a "greater of" approach to volume setting, whereby the procurement volume to be obtained within three years is set at the greater of (1) the level of renewable energy identified in the utility's IRP proceeding as part of the most reasonable

and prudent plan, or (2) 1% of the utility's South Carolina retail sales. These procurement volumes would be over and above the utility's current levels of renewable deployment.

#### Q. HOW IS YOUR TESTIMONY ORGANIZED?

- A. My testimony is organized as follows:
  - I. Background on the Energy Freedom Act and Renewable Energy in South
     Carolina
  - II. Benefits of Competitive Procurement of Renewable Energy
  - III. Implementation of Competitive Procurement of Renewable Energy
  - IV. Synthesis: Role of Competitive Procurement of Renewable Energy in SouthCarolina
  - V. Conclusions and Recommendations

# I. BACKGROUND ON THE ENERGY FREEDOM ACT AND RENEWABLE ENERGY IN SOUTH CAROLINA

- Q. HOW DOES THE ENERGY FREEDOM ACT OF 2019 ("EFA")
  APPROACH RENEWABLE ENERGY?
- A. The EFA covers a wide range of topics and programs relating to renewable energy, with the first section of the act providing guiding policy language: "The commission is directed to address all renewable energy issues in a fair and balanced manner, considering the costs and benefits to all customers of all programs and tariffs that relate to renewable energy and energy storage...." Additionally, within the section of the statute that authorizes competitive procurement of renewable energy, the EFA references "the state's

<sup>&</sup>lt;sup>1</sup> S.C. Code Ann. § 58-41-05.

policy of encouraging renewable energy." This policy was also evident in Act 236 of 2014<sup>3</sup> as well as South Carolina's "Plan for State Energy Policy."<sup>4</sup>

#### HOW DOES THE EFA APPROACH COMPETITIVE PROCUREMENT OF 0. RENEWABLE ENERGY?

The EFA authorizes the Commission "to open a generic docket for the purposes of Α. creating programs for the competitive procurement of energy and capacity from renewable energy facilities by an electrical utility within the utility's balancing authority area if the commission determines such action to be in the public interest." Thus the EFA explicitly includes programs for the competitive procurement of renewable energy as an option within the chapter on Renewable Energy Programs.

#### HAS RENEWABLE ENERGY GROWN IN SOUTH CAROLINA IN Q. **RECENT YEARS?**

Renewable energy generation has grown considerably in South Carolina in recent A. years, but it is important to recognize that that growth has come from a very low starting point. Utility energy mixes are still dominated by coal- and gas-fired generation. In 2021, the Duke Energy system spanning the Carolinas is expected to generate about 6% of its energy from renewables, compared to 25% from natural gas plants and 16% from coal.<sup>6</sup> The DESC system is expected to generate about 8% of its energy from renewables in 2021,<sup>7</sup> compared to generating 45% of its energy from natural gas and 26% from coal in 2019.8

<sup>&</sup>lt;sup>2</sup> S.C. Code Ann. § 58-41-20(F)(2).

<sup>&</sup>lt;sup>3</sup> For example, see S.C. Code Ann. §§ 58-39-110 et seg.

<sup>&</sup>lt;sup>4</sup> S.C. Code Ann. § 48-52-210.

<sup>&</sup>lt;sup>5</sup> S.C. Code Ann. § 58-41-20(E)(2).

<sup>&</sup>lt;sup>6</sup> Duke Energy Carolinas 2020 IRP at 107.

<sup>&</sup>lt;sup>7</sup> Based on 2,032 GWh of renewable energy (DESC 2020 IRP at 27) and 24,091 GWh sales (DESC 2020 IRP at 9).

<sup>&</sup>lt;sup>8</sup> DESC 2020 IRP at 32.

There remains an enormous untapped reservoir of renewable energy potential that could be developed in South Carolina.

# Q. COULD FURTHER RENEWABLE ENERGY GROWTH BENEFIT SOUTH CAROLINA RATEPAYERS?

A. Yes. The recent Commission proceeding on DESC's 2020 IRP has highlighted the potential of additional renewable energy generation to substitute for coal and gas generation, whether or not DESC has a near-term capacity need. The proceeding also noted the potential for renewable energy additions to reduce ratepayer risk exposure to commodity price increases and future greenhouse gas regulations. Further, renewable energy additions would be an effective component of an overall portfolio of new resources that could serve as a replacement for retiring coal generators.

# II. BENEFITS OF COMPETITIVE PROCUREMENT OF RENEWABLE ENERGY

Q. WHAT IS COMPETITIVE PROCUREMENT OF RENEWABLE ENERGY?

<sup>&</sup>lt;sup>9</sup> In Order 2020-832 at 21, the Commission found that "[e]ven in the absence of a need for additional capacity, procurement of energy from solar and/or storage resources in the near term may result in savings for ratepayers, if those resources can provide energy to the system more economically than existing generation resources or alternatives contemplated in the IRP."

<sup>&</sup>lt;sup>10</sup> Id. at 63. In describing the testimony of Kenneth Sercy, the Order noted that

Mr. Sercy identified cost ranges across natural gas and CO2 price scenarios as an appropriate risk metric for commodity price risk, and regret scores as an appropriate risk metric for diversity of generation supply. To illustrate the use of these risk metrics, Mr. Sercy applied the cost range and minimax regret analysis to DESC's proposed resource portfolios, showing revealed that RP7, and not RP2, outperformed the other portfolios when these metrics were applied.

In RP7, a small amount of solar generation displaces fossil generation compared to RP2.

<sup>&</sup>lt;sup>11</sup> For example, see M. Dyson, A. Engel & J. Farbes, *The Economics of Clean Energy Portfolios* (Rocky Mountain Institute, 2018), https://rmi.org/insight/the-economics-of-clean-energy-portfolios/.

A. Competitive procurement of renewable energy is a process whereby suppliers of renewable energy submit bids to meet a renewable energy product request by a procurement administrator. The administrator evaluates the bids to select winners, which creates market competition among suppliers. This market competition makes competitive procurement an effective way to add least-cost renewable energy projects to a power system. 12

# Q. WHAT BENEFITS CAN BE REALIZED FROM ADOPTING A PROGRAM OF COMPETITIVE PROCUREMENT OF RENEWABLE ENERGY?

- A. In addition to driving least-cost procurement of renewable energy projects through market forces, competitive procurement programs have other important benefits, such as:
  - <u>Flexibility</u> procurement design flexibility allows a wide variety of design elements to be combined and tailored to meet the unique circumstances and goals of the jurisdiction.<sup>13</sup>
  - <u>Price discovery</u> well-structured, transparent procurements can effectively identify
    the prices at which renewable energy products are available in the local market, via
    competition among suppliers.<sup>14</sup>
  - <u>Utility planning</u> competitive procurements can incorporate boundaries on renewable energy quantities, timing, and other factors that facilitate utility system planning processes.<sup>15</sup>

<sup>&</sup>lt;sup>12</sup> C.E. Kreycik, T.D. Couture & K.S. Cory, *Procurement Options for New Renewable Electricity Supply*, Nat'l Renewable Energy Laboratory, Technical Report NREL/TP-6A20-52983 (December 2011) at 34.

<sup>&</sup>lt;sup>13</sup> Int'l Renewable Energy Agency and Clean Energy Ministerial, *Renewable Energy Auctions – A Guide to Design* (2015) at 2-22.

<sup>&</sup>lt;sup>14</sup> *Id*.

<sup>&</sup>lt;sup>15</sup> Kreycik, *supra* note 12 at 36. *Direct Testimony of Kenneth Sercy* 

In Order 2020-832 at 21, the Commission found that "[c]ompetitive procurement of such generation resources creates an opportunity for ratepayer savings" (referring to "solar and/or storage resources in the near term").

#### O. HAVE **OTHER JURISDICTIONS** UTILIZED **PROGRAMS** OF COMPETITIVE PROCUREMENT OF RENEWABLE ENERGY?

A. Yes, many U.S. states and a multitude of nations around the world have implemented competitive procurement of renewable energy. <sup>16</sup> While I'm not aware of a comprehensive public database or literature review of such competitive procurement programs, a review of recent request for proposals ("RFP") announcements from a renewable energy trade publication provides an illustration of the prominence of this approach: in the last twelve months, Solar Industry magazine's RFP section has posted more than a dozen renewable energy procurement notices, from utilities and other entities all over the US.<sup>17</sup> These include, for example, TVA, Appalachian Power, Old Dominion Electric Cooperative, NV Energy, NIPSCO, Avista, NorthWestern Energy, and Nebraska Public Power District.

#### PLEASE PROVIDE EXAMPLES OF COMPETITIVE PROCUREMENT Q. OF RENEWABLE ENERGY THAT HAVE BEEN COMPLETED IN THE SOUTHEASTERN US.

A. Utilities across the Southeast have made use of competitive procurement to add renewable energy to their systems. Georgia Power's Advanced Solar Initiative and

<sup>&</sup>lt;sup>16</sup> S. Lawson & A. Monteforte, Renewable Energy Auctions Toolkit: Stages of Auction Design (USAID, July 2020) (describing "800 renewable energy auctions in 61 countries").

<sup>&</sup>lt;sup>17</sup> Solar Industry, RFP, https://solarindustrymag.com/category/solar-news/rfp (last accessed Feb. 16, 2021).

Renewable Energy Development Initiative <sup>18</sup>, the North Carolina Competitive Procurement of Renewable Energy <sup>19</sup>, and TVA's Green Invest program <sup>20</sup> are several examples of competitive procurements of renewables conducted by major regional electric providers; Florida Municipal Power Agency's solar RFPs <sup>21</sup> are an example of a procurement by a smaller utility. In South Carolina, Santee Cooper and Central Electric Power Cooperative conducted a major solar RFP in 2020. <sup>22</sup>

# Q. PLEASE PROVIDE YOUR CONCLUSIONS ABOUT THE BENEFITS OF COMPETITIVE PROCUREMENT OF RENEWABLE ENERGY.

A. There are numerous benefits to using competitive procurement as a mechanism to add renewable energy to a power system, including least-cost renewables procurement, design flexibility, price discovery, and alignment with utility planning processes. These benefits are underscored by the widespread use of this approach, including across the Southeastern U.S., and its ongoing prominence as indicated by current and upcoming procurements.

# III. IMPLEMENTATION OF COMPETITIVE PROCUREMENT OF RENEWABLE ENERGY

<sup>&</sup>lt;sup>18</sup> See Ga. Pub. Serv. Comm'n, *Renewable Energy Programs*, <a href="https://psc.ga.gov/utilities/electric/green-power-pricing/">https://psc.ga.gov/utilities/electric/green-power-pricing/</a> (last accessed Feb. 22, 2021).

<sup>&</sup>lt;sup>19</sup> Discussed in Duke Energy Carolinas 2020 IRP at 288-289.

<sup>&</sup>lt;sup>20</sup> See Tenn. Valley Authority, *Green Invest*, <a href="https://www.tva.com/energy/valley-renewable-energy/green-switch/green-invest">https://www.tva.com/energy/valley-renewable-energy/green-switch/green-invest</a> (last accessed Feb. 22, 2021).

<sup>&</sup>lt;sup>21</sup> For an example, *see* Orlando Utilities Comm'n, *OUC Board Approves Plan to Dramatically Increase Solar Energy* (Jan. 23, 2018) at: <a href="https://ouc.com/about-ouc/news/2018/01/23/ouc-board-approves-plan-to-dramatically-increase-solar-energy">https://ouc.com/about-ouc/news/2018/01/23/ouc-board-approves-plan-to-dramatically-increase-solar-energy</a>

<sup>&</sup>lt;sup>22</sup> See Santee Cooper, "Santee Cooper, Central begin process to add up to 500MW solar power" (June 8, 2020), <a href="https://www.santeecooper.com/news/2020/060820-Santee-Cooper-Central-begin-process-to-add-up-to-500MW-solar-power.aspx">https://www.santeecooper.com/news/2020/060820-Santee-Cooper-Central-begin-process-to-add-up-to-500MW-solar-power.aspx</a>

# Q. WHAT ARE THE KEY CONSIDERATIONS RELATED TO IMPLEMENTATION OF A PROGRAM OF COMPETITIVE PROCUREMENT OF RENEWABLE ENERGY?

- A. To aid the Commission in its exploration of competitive procurement of renewable energy, this section identifies several important areas of procurement design and implementation:
  - 1. Types of procurement approaches and available design options
  - 2. Challenges
  - 3. Best practices

# Q. PLEASE DISCUSS THE TYPES OF COMPETITIVE PROCUREMENT PROGRAMS AND AVAILABLE DESIGN OPTIONS.

- A. There is a wide array of design choices available for competitive procurements, which is one of their advantages as a mechanism for adding renewable energy. The following is a list of design elements<sup>23</sup> that I view as most relevant to consider for a near-term program in South Carolina:
  - <u>Technology eligibility and specifications</u> Which renewable energy technologies should be eligible to submit bids? Should boundaries be placed on project sizes?
  - Volume to procure How much renewable energy should the procurement seek to bring online? When should projects be expected to commence operation?
  - <u>Inclusion of a cost cap</u> Should a total cost cap or price cap be placed on the procurement as an added ratepayer protection mechanism?

<sup>&</sup>lt;sup>23</sup> Based on K. Cleary and H.B. Ratz, *Experience with Competitive Procurements and Centralized Resource Planning to Advance Clean Electricity*, Resources for the Future Working Paper 21-01 (January 2021) at 3-21

- <u>Bidder qualification requirements</u> Should suppliers bidding into the procurement be required to meet eligibility criteria, such as good financial standing or previous experience, to reduce project delivery risk? If so, how strict should these requirements be?
- <u>Bid evaluation</u> Should bids be evaluated solely on pricing, or should other criteria
  be included, such as grid location or local economic development impacts? Should
  an independent administrator be used for bid evaluation and/or other procurement
  tasks?
- Project construction considerations Should penalties be imposed for delayed or underbuilt projects? If so, how should interconnection delays outside of the project developer's control be treated? Should minimum contract tenors be set to ensure project financeability and improve the chances of procurement success?

# Q. PLEASE DISCUSS CHALLENGES ASSOCIATED WITH COMPETITIVE PROCUREMENT PROGRAMS.

A. One challenge commonly cited by reviewers of competitive procurement programs is the administrative due diligence in carrying out the procurement. For example, receiving and evaluating bids can be complex and time consuming, as can monitoring the process, whether monitoring is performed by a regulator or an independent entity.<sup>24</sup>

A second challenge is project delivery, or "realization" risk. Underestimating development costs and underbidding by suppliers can lead to project failure, which can compromise the realization of adding the renewable energy to the grid.<sup>25</sup>

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<sup>&</sup>lt;sup>24</sup> Kreycik, *supra* note 12 at 9.

<sup>&</sup>lt;sup>25</sup> *Id*. at 8.

However, despite the challenge of administrative complexity, generally procurement administration costs are small compared to the benefits of the competition created by the program, and initial procurements also create a foundation of institutional experience and established process that lowers the cost of holding subsequent procurements.<sup>26</sup> And while realization risk is an important consideration, careful procurement design can create rules that guard against this outcome, for example by enhancing project financeability.

# Q. COULD YOU IDENTIFY ANY BEST PRACTICES FOR COMPETITIVE PROCUREMENT PROGRAMS?

A. Yes, I would highlight two simple but important best practices: jurisdictional tailoring and transparency.

# Q. PLEASE EXPLAIN WHAT YOU MEAN BY JURISDICTIONAL TAILORING.

A. Regulators and stakeholders can and should tailor the design of competitive procurements to match local market conditions, policy goals, and institutional experience.<sup>27</sup> Renewable energy penetration levels, existing market size for different technologies, utility resource plans, status of existing renewable energy targets, interconnection processes, and experience with previous procurements are factors that can guide the design of a procurement to ensure that it successfully meets policy goals and captures ratepayer benefits.

#### Q. PLEASE ELABORATE ON TRANSPARENCY AS A BEST PRACTICE.

<sup>&</sup>lt;sup>26</sup> Int'l Renewable Energy Agency, *supra* note 13 at 2-25.

<sup>&</sup>lt;sup>27</sup> Tetra Tech ES, Inc., A Policymaker's Guide to Renewable Energy Auctions (USAID, July 2019).

Clearly defined, fair rules and obligations for all stakeholders will greatly facilitate A. a successful procurement.<sup>28</sup> Timelines, eligibility, bidding procedures, evaluation methods, and other elements should be communicated clearly to all participants in a timely manner, for example through a dedicated website. Process evaluations at the end of the procurement can also inform future procurement design.

#### Q. PLEASE PROVIDE YOUR RECOMMENDATIONS ON WHICH GOALS TO **EMPHASIZE** DESIGNING **COMPETITIVE PROCUREMENT** IN PROGRAMS.

South Carolina has a state policy of encouraging renewable energy, and still has a A. relatively low renewable energy penetration compared to state fossil generation, which suggests that effective, timely realization of renewable energy additions would be an appropriate focus. Additionally, given that the Commission has not yet directed or approved any utility to conduct competitive renewable energy procurement under the EFA, simplicity and building a foundation to enable future procurements could also be goals. Price discovery would be another valuable outcome, especially given recent litigation time devoted to renewable energy price assumptions for IRP modeling.<sup>29</sup>

Notably, recognizing these jurisdictional circumstances and goals can provide considerable direction in answering the design questions outline above. For example, the goal of simplicity points to focusing technology eligibility and specifications, and minimizing bid evaluation complexity. The goal of successful realization points to at least basic bidder qualification requirements and requesting contract tenors that will facilitate project financing, such as 20 years.

<sup>&</sup>lt;sup>28</sup> Int'l Renewable Energy Agency, *supra* note 13 at 1-40.

<sup>&</sup>lt;sup>29</sup> See Order No. 2020-832 at 47-49.

- Q. PLEASE PROVIDE YOUR RECOMMENDATIONS FOR IMPLEMENTATION OF A PROGRAM OF COMPETITIVE PROCUREMENT OF RENEWABLE ENERGY IN SOUTH CAROLINA.
- A. Consulting firm Tetra Tech and the U.S. Agency for International Development discuss the concept of "common stages" of competitive procurement design, whereby early-stage procurements in a given jurisdiction tend to be simple, emphasize attracting investment and project development, price discovery, and establishing a basic process that can be further developed in subsequent procurements. Later stage procurements are increasingly complex and sophisticated, and can accommodate higher renewable energy penetrations and can further optimize project development and provide even greater ratepayer benefits.<sup>30</sup>

I recommend a procurement design that is kept as simple as possible, while providing strong assurances of project realization and seeking to add least-cost renewable energy to South Carolina grids and reveal current local market prices, especially for leading renewable technologies such as solar PV and energy storage. Provisions for managing renewable energy curtailment would also be worth considering given jurisdictional utilities within the state have a non-trivial level of existing solar PV penetration on the grid.

# IV. SYNTHESIS: ROLE OF COMPETITIVE PROCUREMENT OF RENEWABLE ENERGY IN SOUTH CAROLINA

Q. HOW WOULD A COMPETITIVE PROCUREMENT PROGRAM FIT WITHIN SOUTH CAROLINA'S ENERGY POLICY AND REGULATORY CONTEXT?

<sup>&</sup>lt;sup>30</sup> See Lawson, supra note 16. Direct Testimony of Kenneth Sercy

A. As noted above, the EFA addresses various topics and programs related to renewable energy and how renewable energy resources are considered within utility regulation as a whole. Two topics are of particular relevance for competitive procurement program planning: the Public Utility Regulatory Policies Act ("PURPA") and IRP.

# Q. PLEASE DISCUSS HOW A COMPETITIVE PROCUREMENT PROGRAM RELATES TO PURPA.

A. PURPA's strengths include its low transaction costs due to contract standardization, facilitation of project financing, and enhanced market access for a diversity of renewable energy developers.<sup>31</sup> The EFA's focus and detail on PURPA implementation strongly suggest that the South Carolina General Assembly views this as an important avenue for renewable energy development in South Carolina.

As discussed above, the EFA also specifically includes competitive procurement as another avenue for expanding renewable energy. A competitive procurement approach to renewable energy expansion has a distinctive set of strengths, which I have reviewed in this testimony, that are worth having in the energy policy and regulatory toolbox. In other words, a program of competitive procurement of renewable energy pairs well with ongoing PURPA implementation, and would help provide a variety of pathways for renewable energy development, thus supporting the state's policy for encouraging renewable energy.

# Q. PLEASE DISCUSS HOW A COMPETITIVE PROCUREMENT PROGRAM RELATES TO IRP.

A. The IRP identifies the most reasonable and prudent plan for meeting customer demand considering costs, risks, and other factors.<sup>32</sup> A well-developed IRP can inform

<sup>31</sup> Kreycik, supra note 12 at 18-22.

<sup>&</sup>lt;sup>32</sup> S.C. Code Ann. § 58-37-40.

design of a competitive procurement program for renewable energy by, for example, identifying procurement volumes and timing, cost cap levels if applicable, and technologies to emphasize.

- Q. PLEASE PROVIDE AN OVERALL SYNTHESIS OF YOUR TESTIMONY ON RENEWABLE ENERGY AND COMPETITIVE PROCUREMENT BENEFITS AND THE ROLE COMPETITIVE PROCUREMENT PROGRAMS SHOULD PLAY WITHIN SOUTH CAROLINA'S ENERGY POLICY AND REGULATORY CONTEXT.
- A. South Carolina has a state policy of encouraging renewable energy and, while renewable generation has grown in recent years, it remains a small portion of utility energy mixes. Renewable energy acts as a substitute for coal and gas generation, reducing ratepayer risk exposure, and can also play a key part in enabling coal retirements.

Competitive procurements harness market forces to obtain least-cost renewable generation, provide price discovery for renewables, and align well with utility planning processes. Implementing a competitive procurement of renewable energy for Commission jurisdictional utilities for the first time in South Carolina would also build valuable institutional and market experience that will enable future procurements that may be larger and more complex. For these reasons, implementing a near-term program for the competitive procurement of renewable energy would benefit South Carolina ratepayers and would be in the public interest.

I recommend tailoring the program design to South Carolina's particular circumstances and goals, as discussed above. And given the current unknown outcomes of

the DESC and Duke Energy IRP proceedings, I recommend a "greater of" approach to setting the volume of the procurement.

# Q. PLEASE DESCRIBE WHAT YOU MEAN BY A "GREATER OF" APPROACH TO SETTING THE VOLUME OF THE PROCUREMENT.

A. In a greater of approach, the IRP proceeding outcomes would inform how much renewable energy to procure. If the utility's IRP identifies renewable energy additions in the next three years as part of the most reasonable and prudent plan, the procurement volume would be set at the level identified in that plan, unless the level is less than 1% of the utility's South Carolina retail sales. In the latter case, setting the procurement volume at 1% of South Carolina retail sales strikes a reasonable balance between achieving public interest benefits such as risk reduction, price discovery, and institutional experience with this widely used tool, while not materially deviating from the IRP.

In summary, I recommend a greater of approach whereby the procurement volume to be obtained within three years is set at the greater of (1) the level of renewable energy identified in the utility's IRP proceeding as part of the most reasonable and prudent plan, or (2) 1% of the utility's South Carolina retail sales.

#### V. CONCLUSIONS AND RECOMMENDATIONS

- Q. PLEASE SUMMARIZE YOUR TESTIMONY CONCLUSIONS AND RECOMMENDATIONS.
- A. As described above, competitive procurement of renewable energy offers numerous benefits, comports with South Carolina's stated policy of encouraging renewable energy, and would be expected to reduce ratepayer risk along with the need for fossil fuel generation. As such, implementing a near-term program for the competitive procurement

of renewable energy would be in the public interest. I recommend a simple procurement design in the near-term to build the institutional and market experience needed to enable larger, more complex procurements in the future. Such a program should seek to add least-cost renewable energy to South Carolina grids and reveal current local market prices. For a near-term program, I suggest a program that sets the procurement volume to be obtained within three years at the greater of (1) the level of renewable energy identified in the utility's IRP proceeding as part of the most reasonable and prudent plan, or (2) 1% of the utility's South Carolina's retail sales.

#### Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

A. Yes.

#### STATE OF SOUTH CAROLINA

#### BEFORE THE PUBLIC SERVICE COMMISSION

DOCKET NO. 2019-365-E

In the Matter of:	)
Exploration of a South Carolina	) CERTIFICATE OF SERVICE
Competitive Procurement Program	)
for the Competitive Procurement of	)
Energy and Capacity from Solar and	)
Other Renewable Energy Facilities	)
by an Electrical Utility as Allowed	)
by South Carolina Code Section 58-	)
41-20(E)(2)	)

I hereby certify that the parties listed below have been served with a copy of the Direct Testimony of Kenneth Sercy filed on behalf of the South Carolina Coastal Conservation League and Southern Alliance for Clean Energy by electronic mail or by deposit in the U.S. Mail first-class, postage prepaid.

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s/ Andrea Rachel Pruzin